

ABSTRACT OF THE DISCLOSURE

The present invention provides a technique enabling to control fringe spacing s and an interference width W independently of each other, which are important parameters for an interferometer using an electron biprism.

In the present invention, two electron biprisms 9a, 9b are used in two stages along the optical axis, and fringe spacing s and an interference width W are controlled independently of each other by controlling a voltage applied to an electrode of each of the electron biprisms. Also Fresnel diffraction can be suppressed.